BRUHAT BANGALORE MAHANAGARA PALIKE

MEASUREMENT SHEET

2ND AND FINAL BILL

Name of work: Package - 3 (Including 4 Works) 1) Improvements to Roads and Drains at V P Layout in Ward No. 09, Vidyaranyapura. 2) Improvements to Roads and Drains from 1st, 2nd and 3rd Cross Jai Hanuman Layout and Budha Jyothi Layout in Ward No. 09, Vidyaranyapura. 3) Improvements to Roads and Drains from Sampige Road to Mramma Temple in Ward No. 09, Vidyaranyapura. 4) Improvements to Roads and Drains at Gurudharshan Layout in Ward No. 09, Vidyaranyapura.

Estimated Cost : Rs. 100.00 Lakhs

Head of Account : P-3167 Development Works

Name of Agency: Sri Alankar K.B, # 12, MSV Network Road, near Shobha Apartment, Amruthahalli, Sahakaranagara (Post), Bangalore - 92.

Work order No: BBMP/EE/BTP/WO/90/2018-19 Dated: 30.08.2018.

Measurements Recarded on :

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
1	Excavation for road, drains and similar works KSRRB 300-1. Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods etc complete as per specifications and directions of engineer in charge of the work								Cum	
							Previous Qty	**537.07**		
	CC Culvert									
	Maramma Temple	1	8.00			2.00	1.00	16.00		
		1	8.00			1.80	1.00	14.40		
	Gurudharsham Layout	1	4.70			1.80	1.00	8.46		
		1	4.80			1.80	1.00	8.64		
		1	4.60			1.80	1.00	8.28		
							Total Qty	**592.85**		
							Qty Limited to Tender Qty	**592.33**		
							Deduct Previous Qty	**-537.07**		
							Present Qty =	**55.26**	238.00	**13152.00**
2	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing etc complete as per specifications and directions of engineer in charge of the work								Cum	
							Previous Qty	**105.17**		
	CC Culvert									
	Maramma Temple	1	8.00			1.50	0.15	1.80		
		1	8.00			1.50	0.15	1.80		
	Gurudharsham Layout	1	4.70			1.50	0.15	1.06		
		1	4.80			1.50	0.15	1.08		
		1	4.60			1.50	0.15	1.04		
							Total Qty	**111.94**		
							Qty Limited to Tender Qty	**108.48**		
							Deduct Previous Qty	**-105.17**		
							Present Qty =	**3.31**	5544.00	**18351.00**

Contractor

Assistant Engineer

Assistant Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
3	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour etc complete as per specifications and directions of engineer in charge of the work								Sqm	
								Previous Qty	**981.60**	
	CC Culvert Side Wall									
	Maramma Temple	4	8.00				1.20	38.40		
		4	8.00				1.20	38.40		
	Gurudharsham Layout	4	4.70				1.20	22.56		
		4	4.80				1.20	23.04		
		4	4.60				1.20	22.08		
								Total Qty	**1126.08**	
								Qty Limited to Tender Qty	**1123.20**	
								Deduct Previous Qty	**-981.60**	
								Present Qty =	**141.60**	356.00 **50410.00**
4	Removing and refixing stone slabs of drains and pointing in CM (1:3) etc complete as per specifications and directions of engineer in charge of the work								Sqm	
								Previous Qty	**1147.50**	
								Present Qty	**NIL**	
5	Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing etc complete as per specifications and directions of engineer in charge of the work								Sqm	
								Previous Qty	**286.88**	
								Present Qty	**NIL**	
6	Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing etc complete as per specifications and directions of engineer in charge of the work								Sqm	
								Previous Qty	**680.00**	
								Present Qty	**NIL**	
7	Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.69 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing etc complete as per specifications and directions of engineer in charge of the work								Cum	
								Previous Qty	**68.00**	
								Present Qty	**NIL**	
8	Providing and laying cement concrete using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) M 20 for R.C.C works laid in 15 cms thick layers and well compacted vibrating, curing, for raft foundation column footing , main and secondary beams with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) etc complete as per specifications and directions of engineer in charge of the work								Cum	
								Previous Qty	**133.59**	
	CC Culvert Bottom									
	Maramma Temple	1	8.00			1.50	0.15	1.80		
		1	8.00			1.50	0.15	1.80		
	Gurudharsham Layout	1	4.70			1.50	0.15	1.06		
		1	4.80			1.50	0.15	1.08		
		1	4.60			1.50	0.15	1.04		
	CC Culvert Side Wall									
	Maramma Temple	2	8.00			0.30	0.90	4.32		

Contractor

Assistant Engineer

Assistant Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
		2	8.00			0.30	0.90	4.32		
	Gurudharsham Layout	2	4.70			0.30	0.90	2.54		
		2	4.80			0.30	0.90	2.59		
		2	4.60			0.30	0.90	2.48		
							Total Qty =	**156.62**		
							Qty Limited to Tender Qty	**156.13**		
							Deduct Previous Qty	**-133.59**		
							Present Qty =	**22.54**	6534.00	**147276.00**
9	Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 - TMT bars Fe 500 etc complete as per specifications and directions of engineer in charge of the work								Tonnes	
							Previous Qty	**9.35**		
	consider 70 Kgs/Cum	0.070	22.54					**1.58**		
							Total Qty =	**10.93**		
							Qty Limited to Tender Qty	**10.61**		
							Deduct Previous Qty	**-9.35**		
							Present Qty =	**1.26**	69300.00	**87318.00**
10	Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications etc complete as per specifications and directions of engineer in charge of the work								Cum	
							Previous Qty	**40.00**		
							Present Qty	**NIL**		
11	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc complete as per specifications and directions of engineer in charge of the work								Sqm	
							Previous Qty	**320.00**		
							Present Qty	**NIL**		
12	Providing precast slab of 250 mm thick including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge								Sqm	
							Previous Qty	**63.00**		
	Maramma Temple	1	8.00			1.50		12.00		
		1	8.00			1.50		12.00		
	Gurudharsham Layout	1	4.70			1.50		7.05		
		1	4.80			1.50		7.20		
		1	4.60			1.50		6.90		
							Total Qty =	**108.15**		
							Qty Limited to Tender Qty	**108.00**		
							Deduct Previous Qty	**-63.00**		
							Total Qty =	**45.00**	5445.00	**245025.00**

Contractor

Assistant Engineer

Assistant Executive Engineer

Vidyaranyapura Sub Division
BBMP, Bangalore - 97

SL. No	DESCRIPTIONS	NO	Length meters	Width 1 meters	width 2 meters	Average Width meters	Depth meters	Quntity	Unit / Rate in Rs.	Amount in Rs.
13	Providing precast slab of 100 mm thick including cost of all materials, labour, curing, transportation, loading unloading, etc., complete as per the direction of engineer in charge								Sqm	
							Previous Qty	**1052.15**		
							Present Qty	**NIL**		
14	Providing and fixing pre cast solid cement concrete kerb stones made out of CC 1:2:4 with top and bottom width 114 and 165 mm respectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting including formwork, curing, including cost of materials, labour charges of machinery, loading and unloading, lead and lift, transportation etc complete as per specifications and directions of engineer in charge of the work								Nos	
							Previous Qty	**791.00**		
							Present Qty	**NIL**		
15	Providing and applying ready mix priming coat over concrete / masonry / asbestos cement sheet / plastered surfaces including preparing the surface after thoroughly cleaning of oil, grease, dirt and other foreign matter, and sand papering including cost of materials, labour, etc complete as per specifications and directions of engineer in charge of the work								Sqm	
	Maramma Temple Road									
		2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	14.30				0.45	12.87		
	Vijaya Store Opp Road	2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	18.60				0.45	16.74		
	Jai Hanuman layout 1st Cross									
		2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	28.00				0.45	25.20		
	Jai Hanuman layout 2nd Main									
		2.00	30.00				0.45	27.00		
		2.00	30.00				0.45	27.00		
		2.00	4.50				0.45	4.05		
							Total Qty =	**382.86**		
							Qty Limited to Tender Qty=	**382.50**	35.00	**13388.00**
16	Providing and applying spray painting in two coats (excluding priming coat) over concrete / masonry / asbestos cement sheet / plastered surfaces with flat wall paint of approved brand to give even shade after cleaning the surface of all dirt, dust and other foreign matter, and sand papering including cost of materials, labour, etc complete as per specifications and directions of engineer in charge of the work									
				Qty Vide Item No. 15				382.50		
							Total Qty =	**382.50**	79.00	**30218.00**
17	Scarifying kankar / gravel / metal crust upto 150mm thick with pick axes and disposal of stuff including cost of all labour charges complete as per specifications etc complete as per specifications and directions of engineer in charge of the work.								Sqm	
							Previous Qty	**2622.51**		
							Present Qty	**NIL**		

Contractor

Assistant Engineer

Assistant Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
18	Wet Mix Macadam - Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density etc complete as per specifications and directions of engineer in charge of the work								Cum	
							Previous Qty	**603.18**		
							Present Qty	**NIL**		
19	Providing and applying primer coat with S.S. bitumen emulsion on prepared surface of granular base such as WMM including cleaning of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means etc complete as per specifications and directions of engineer in charge of the work								Cum	
	Maramma Temple Road									
		1	30.00	6.70	7.00	6.85		205.50		
		1	30.00	7.00	6.30	6.65		199.50		
		1	14.30	6.30	6.40	6.35		90.81		
	Vijaya Store Road	1	30.00	7.30	6.80	7.05		211.50		
		1	30.00	6.80	6.80	6.80		204.00		
		1	30.00	6.80	6.50	6.65		199.50		
		1	18.60	6.50	6.80	6.65		123.69		
	Gurudharshan Layout Main Road									
		1	30.00	4.10	4.50	4.30		129.00		
		1	30.00	4.50	4.70	4.60		138.00		
		1	30.00	4.70	4.80	4.75		142.50		
		1	27.90	4.80	4.80	4.80		133.92		
	Cross Road									
		1	30.00	4.50	4.20	4.35		130.50		
		1	30.00	4.20	4.10	4.15		124.50		
		1	30.00	4.10	4.20	4.15		124.50		
		1	30.00	4.20	4.20	4.20		126.00		
		1	30.00	4.20	4.10	4.15		124.50		
		1	30.00	4.10	4.00	4.05		121.50		
		1	8.00	4.00	4.60	4.30		34.40		
		1	15.00	5.00	4.80	4.90		73.50		
								2637.32		
							Total Qty =	**2622.50**	35.00	**91788.00**
20	Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. MORTH Specification No. 509 - using 40/60 TPH capacity H.M.P. with Mechanical Paver Gr-II (30 mm to 45 mm) with 6 % VG-30 Bitumen etc complete as per specifications and directions of engineer in charge of the work								Cum	
	Maramma Temple Road									
		1	30.00	6.70	7.00	6.85	0.040	8.22		
		1	30.00	7.00	6.30	6.65	0.040	7.98		
		1	14.30	6.30	6.40	6.35	0.040	3.63		
	Vijaya Store Road	1	30.00	7.30	6.80	7.05	0.040	8.46		
		1	30.00	6.80	6.80	6.80	0.040	8.16		
		1	30.00	6.80	6.50	6.65	0.040	7.98		
		1	18.60	6.50	6.80	6.65	0.040	4.95		
	Gurudharshan Layout Main Road									
		1	30.00	4.10	4.50	4.30	0.040	5.16		
		1	30.00	4.50	4.70	4.60	0.040	5.52		
		1	30.00	4.70	4.80	4.75	0.040	5.70		
		1	27.90	4.80	4.80	4.80	0.040	5.36		
	Cross Road									
		1	30.00	4.50	4.20	4.35	0.040	5.22		

49.38

Contractor

Assistant Engineer

Assistant Executive Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

SL. No	DESCRIPTIONS	NO	Length	Width 1	width 2	Average Width	Depth	Quntity	Unit / Rate in Rs.	Amount in Rs.
			meters	meters	meters	meters	meters			
		1	30.00	4.20	4.10	4.15	0.040	4.98		
		1	30.00	4.10	4.20	4.15	0.040	4.98		
		1	30.00	4.20	4.20	4.20	0.040	5.04		
		1	30.00	4.20	4.10	4.15	0.040	4.98		
		1	30.00	4.10	4.00	4.05	0.040	4.86		
		1	8.00	4.00	4.60	4.30	0.040	1.38		
		1	15.00	5.00	4.80	4.90	0.040	2.94		
								105.49		
							Total Qty =	104.90	7500.00	
							Grand Total		=	

Rupees Fourteen Lakh(s) Eighty Three Thousand Six Hundred Seventy Six Only

Contractor

Assistant Engineer

Assistant Executive Engineer
Vidyaranyapura Sub Division,
BBMP, Bangalore-97